Amendments to the Claims

Claim 1 (Currently Amended): A method for producing a fluid planar lipid bilayer-based membrane-anchored ligand system with defined ligand valency comprising:

a) ~~contacting~~ providing a solid surface in contact with a lipid bilayer, wherein said lipid bilayer comprises ~~containing~~ lipids conjugated to a first specific binding pair member;

b) ~~functionally~~ linking a ligand to a second specific binding pair member which has binding affinity for said first specific binding pair member, said second specific binding pair member comprising at least one binding site for binding said first specific binding pair member; and

c) contacting the lipid bilayer of step a) with the linked ligand of step b) whereby contact of the lipid bilayer with said second specific binding pair member ~~functionally~~ linked to said ligand results in anchoring of the ligand to said lipid, thereby forming a fluid planar lipid bilayer-based membrane-anchored ligand system with defined ligand valency.

Claim 2 (Currently Amended): The method of claim 1, wherein said ligand is ~~functionally~~ linked to said second binding pair member through binding interaction with said first binding pair member.

Claim 3 (Currently Amended): The method of claim 1 further comprising contacting said lipid bilayer with at least one cell comprising a receptor having binding affinity for said at least one ligand.

Claim 4 (Currently Amended): The method of claim 1 further comprising contacting said lipid bilayer with a virus comprising a receptor having binding affinity for said at least one ligand.

Claim 5 (Currently Amended): A fluid planar lipid bilayer-based membrane-anchored ligand system produced by the method

of claim 1.

Claim 6 (Currently Amended): The fluid planar lipid bilayer-based membrane-anchored ligand system of claim [[4]] 5, wherein said at least one ligand is selected from the group consisting of I-EK-MCC and I-AK-CA, neuropilin-1, LFA1, DC-SIGN, ICAM1, ICAM3, major histocompatibility complex (MHC), T cell receptor (TCR), CD100, SEMA4A, CD40, CD40L, CD80, CD86, CD28, SEMA7A, CD72, TIM2, B7-H1/B7-DC, B7-1/B7-2, B7RP-1, B7H3, 4-1BBL, CD27L, OX40L, OX40, CD27, 4-1BB, ICOS, CTLA4, PD1, plexin-C1, CD4, CD8, chemokine receptor (CKR) family members, CXCR4, CCR5, CCR3, gamma-cytokine receptor family members, interleukin 2 receptor (IL2R), IL4R, IL7R, IL15R, SRA, CD68, LOX1, heat shock protein (HSP) receptors, CD91, TLR4, TLR2, CD36, CD40, CD14, v3 integrin, and tumor necrosis factor receptor (TNFR) family members, TNFR, FAS, and Fas ligand (FASL).

Claim 7 (Currently Amended): The method of claim 1, wherein said surface is selected from the group consisting of a glass coverslip, ~~a biacore chip,~~ a sensor chip or a tissue culture plate.

Claim 8 (Currently Amended): The method of claim 1, wherein said first binding pair member is biotin and said second binding pair member comprises a plurality of binding sites for said first member and is selected from the group consisting of streptavidin ~~or~~ and avidin.

Claim 9 (Original): The method of claim 1, wherein said first binding pair member is nickel and said second binding pair member is a histidine tag.

Claim 10 (Original): The method of claim 1, wherein said specific binding member pairs are selected from the group consisting of nickel-histidine, biotin -streptavidin,

antibody-antigen, lectin-carbohydrate, and complementary oligonucleotides.

Claim 11 (Original): The method of claim 3, wherein said at least one cell is selected from the group consisting of a T cell, an antigen presenting cell, a macrophage, a B cell, a neuron, a fibroblast, an endothelial cell, an epithelial cell, a synoviocyte, a muscle cell, a stem cell, and a dendritic cell.

Claim 12 (Original): The method of claim 4, wherein said virus is HIV.

Claim 13 (Original): The method of claim 1, wherein said lipids are selected from the group consisting of POPC, DOPC, and derivatives thereof.

Claim 14 (Original): A kit for practicing the method of claim 1, comprising:

a) lipids;
b) a solid surface;
c) a plurality of first and second binding members; and
d) optionally at least one ligand of interest.

Claim 15 (Original): The kit of claim 14, further comprising viable cells, appropriate buffers, gel filtration apparatus, detectable labels and instructional material.

Claim 16 (New): The method of claim 1, wherein said solid surface comprises a dextran cushion.